

A Level (including AS Level) Physics (9702)

My candidates did OK last session but I would like advice on how to improve my teaching and where they were losing marks unnecessarily – what help can I get?

If you want a detailed breakdown then you can ask for a Group Report on your candidates, but this will cost you money and so is only really worth doing if you have serious concerns. If you want more general advice, the Report on the Examination gives a wealth of advice on teaching and highlights where candidates have most difficulty, allowing you to concentrate on these areas.

What equipment should I provide for the practical exam and for general teaching?

The minimum requirements are given in the syllabus. Additional information is given in Cambridge International Examination's booklet 'Planning Science in Secondary Schools', available from our publications department, although this booklet is geared primarily at courses for the 11 – 16 age group.

What help and advice can you give me about health and safety in the laboratory?

The most important point of first contact is with the organisation responsible for health and safety in schools locally, which must be consulted if you are in any doubt and which will advise on any local legal requirements. In addition, there are several useful guides available and many are listed in the booklet 'Planning Science in Secondary Schools'. Most school laboratory suppliers' catalogues have details of safety requirements, and an on-line resource is located at: <http://www.labsafety.org/freedocs.htm> .

Can I just teach through the syllabus in the order it is written?

You can, although most teachers devise their own teaching sequence and you may prefer to do this. The arrangement of subject matter in the syllabus was not intended to represent a teaching order, which is probably why most teachers adapt it. However, it can be used as a teaching order with only minor modification if you wish.

Do I have to?

No, if you feel that the subjects should be taught in a different order, then teach it in the manner with which you feel most comfortable. For candidates who are sitting the AS and A2 in the same session, some subjects for the A2 may well be better dealt with in the first year.

Which is the correct textbook for the course?

We don't require Centres to use any one particular textbook for our courses, and we would hope that wherever possible teachers would make use of a variety of different resources, drawing from the best bits of each.

Where can I find resources and booklists?

The back of the syllabus has a list of up-to-date books and some on-line resources.

What is the difference between the AS and the A2 practical?

Both involve practical work under exam conditions but the A2 practical will involve more demanding exercises and an element of planning. Past papers give a good indication of what is required, and the section in the syllabus on practical papers gives the definitive description of what is required.

How many significant figures should my students give in their answers?

They should use, as a general rule, as many significant figures as given in the data. It is usual to work to 2 or 3 significant figures depending on the precision of the data.

Is there an option available which doesn't involve any assessment of practical skills?

No. Practical skills are an integral part of Physics. A Physics qualification without a practical component would be a second-rate assessment of the subject, and CIE aims to provide valid qualifications acceptable in all parts of the world.

I am in the middle of setting up the practical examination, and I need to look at the question. Am I allowed to look at a copy of the question paper?

No. You should be preparing the examination using the Confidential Instructions, which are issued to Centres in confidence well in advance of the examination. These instructions tell you all you need to know about the apparatus requirements, how the apparatus is to be arranged, and what it will be used for. If you have a problem which cannot be resolved using the Confidential Instructions, please telephone our Customer services line on +44 1223 553554.

I haven't got the exact equipment specified in the Confidential Instructions, but I do have something similar. Am I allowed to adapt the experiment at all?

Yes, you are allowed to make minor adaptations to the apparatus, providing that the apparatus still works as specified in the Confidential Instructions. You do not need to seek our approval for these minor adaptations. However, you must report the adaptations in detail to the examiners, by completing the Supervisor's Report form on the back of the Confidential Instructions. The Supervisor's Report Form should be enclosed with the candidates' completed scripts. More substantial adaptations, which require changes to the experiment or which cause the apparatus to work in a different way from that described in the Confidential Instructions, are not allowed. If you are in any doubt, please telephone our Customer services line on +44 1223 553554.